

dinaliter tenuicostatis; apertura ovata; peristome paullum reflexo, dentibus duobus munito, hoc parietali, illo basali, oppositis, inconspicuis.

Long. 1·90, lat. ·75 mill.

Hab. Griqualand East (*E. R. Sykes, Esq.*).

EXPLANATION OF PLATE III.

- | | |
|--|---|
| <i>Fig. 1.</i> <i>Macrocyclus Quekettiana.</i> | <i>Fig. 11.</i> <i>Ennea maritzburgensis.</i> |
| <i>Fig. 2.</i> <i>Achatina scævola.</i> | <i>Fig. 12.</i> — <i>polita.</i> |
| <i>Fig. 3.</i> — <i>penestes.</i> | <i>Fig. 13.</i> — <i>pulchella.</i> |
| <i>Fig. 4.</i> <i>Stenogyra Crawfordi.</i> | <i>Fig. 14.</i> — <i>socratica.</i> |
| <i>Fig. 5.</i> <i>Buliminus maritzburgensis.</i> | <i>Fig. 15.</i> — <i>tharfieldensis.</i> |
| <i>Fig. 6.</i> — <i>transvaalensis.</i> | <i>Fig. 16.</i> — <i>Vandenbroeckii.</i> |
| <i>Fig. 7.</i> — <i>jejonus.</i> | <i>Fig. 17.</i> — <i>vanstaudensis.</i> |
| <i>Fig. 8.</i> <i>Ennea Crossleyana.</i> | <i>Fig. 18.</i> <i>Succinea Bowkeri.</i> |
| <i>Fig. 9.</i> — <i>drakensbergensis.</i> | <i>Fig. 19.</i> <i>Planorbis Bowkeri.</i> |
| <i>Fig. 10.</i> — <i>euthymia.</i> | <i>Fig. 20.</i> — <i>Crawfordi.</i> |

XXII.—*On some Ethiopian Pentatomidæ of the Group Halyinæ.* By E. BERGROTH, M.D.

THE object of this paper is to give descriptions of some new or imperfectly known genera and species of Halyinæ. This group, which includes some of the most conspicuous Pentatomidæ, has its headquarters in Australia, but it is also well represented in Africa, although many of the species are doubtless still undescribed.

1. *Dalpada Cambouei*, Fallon.

Halys Cambouei, Fallon, Rev. d'Ent. x. 5 (1891).

Subovata, supra straminea, sat dense subacervatim nigro-punctata, subtus testacea, lateribus capitis, pectoris ventrisque nigris, in capite et pectore vittam angustam rufescentem includentibus, maculis marginalibus segmentorum ventralium semicircularibus pallidis. Caput pronoto longius, elongato-triangulare, basi nigro-bimaculatum, jugis tylo multo longioribus et ante hunc contiguis, apice obtusis, lateribus nonnihil ante apicem obtuse angulato-emarginatis, ocellis mox pone lineam inter angulum posticum oculorum fictam sitis, bucculis antice rotundatis, rostro apicem segmenti secundi ventris attingente, antennis (apice mutilis) fuscis, articulis duobus basalibus flavo-strigatis, primo angulum anteapicalem jugorum haud superante, tertio secundo perpaullo longiore. Pronotum mox ante medium transversim impressum, marginibus lateralibus anticis leviter sinuatis, ante sinum inæqualiter denticu-

latis, angulis lateralibus levissime eminulis, rectis. Scutellum apice obtuse subangulatum. Pectus ad acetabula postica macula nigra notatum, orificiis in sulcum longum leviter curvatum continuatis. Corium pone medium macula parva laevigata pallida notatum, margine apicali leviter rotundato; membrana cinerea, venis fuscis. Abdomen dorso fusco-testaceum, connexivo nigro, fascia media segmentorum testacea, ventre parce fusco-punctulato. Pedes antici nigri, dimidio basali femorum horumque dimidio apicali supra et subtus, annulo submediano et obsoletiore subbasali subapicalique tibiarum atque articulis duobus primis tarsorum superne testaceis (pedes posteriores desunt).

Long. ♂ 10·5 mm.

Madagascar.

This species differs from the typical *Dalpadæ* in having the bucculae rounded anteriorly and the ocelli a little nearer to the base of the head. It is allied to *D. capitata*, Dist., but is much smaller, differently coloured, and with the third antennal joint longer.

Mons. Fallon's type is here described.

ANOLCUS, gen. nov.

Corpus depresso-conicum. Caput conicum, supra transversum convexiusculum, apice obtusum, parte anteoculari latitudine longiore, lateribus teretibus, ante oculos haud sinuatis, tylo jugis paullo longiore, ocellis in linea inter basin oculorum ficta positis, a linea media capitis quam ab oculis paullo magis distantibus, buceulis humilibus, antice in angulum acutum elevatis, postice ultra medium oculorum haud productis, rostro basin ventris attingente, articulo primo buceulas vix superante, secundo tertio parum longiore, quarto tertio fere duplo breviore, tuberculis antenniferis ab oculis et apice jugorum aequo longe distantibus, antennis quinque-articulatis, articulo basali apicem capitis non attingente. Pronotum apice leviter sinuatum, basi subrectum, angulis basalibus obtuse rotundatis, marginibus lateralibus anticis serralatis. Scutellum parte apicali angustum, frenis medium scutelli perpaullo superantibus. Mesosternum medio carinatum, carina lata depressa. Orificia in sulcum mediocrem continuata. Corium scutello longius; membrana laxissime reticulata, venis circiter quattuor areolas sex (duas basales, quattuor apicales) formantibus instructa. Abdomen subtus haud sulcatum, spiraculis ad marginem anticum segmentorum approximatis, a margine postico et lateral i aequo longe distantibus. Femora subtus prope apicem spinulosa; tibiae supra sulkatae, anticae triquetrae.

This genus is allied to *Dalpada*, A. & S., but is at once distinguished, *inter alia*, by the peculiar neuration of the membrane.

2. *Anolcus campestris*, sp. n.

Ovatus, pallide stramineus, supra acervatim obscure virescenti- vel fusco-cinereo-punctatus, subtus concoloriter punctulatus. Caput pronoto subæqñilongum, supra et subtus vittis sex obscure virescentibus ornatum, vittis superioribus extimis ad angulum anticum oculorum oblique interruptis, vittis binis interioribus medio coalitis, interstitiis inter vittas elevatis, lœvibus, articulo ultimo rostri nigro, antennis medium abdominis paullo superantibus, græcilibus, nigris, articulo primo diametro verticali oculi æquilongo, pallido, extus nigro-strigato, articulis tribus ultimis basi flavidis, secundo primo plus quam duplo longiore, tertio et quinto secundo subæqualibus, quarto ceteris paullo longiore. Pronotum longitudine duplo et dimidio latius, angulis apicalibus obtusis, angulis lateralibus leviter angulato-emarginatis, marginibus lateralibus anticus pone medium profunde sinuatis, ante sinum serrulatis, marginibus lateralibus posticis prope angulos laterales obtuse angulatis, disco medio præsertim latera versus transversim leviter impresso, margine cuneto, linea longitudinali media, linea intra marginem lateralem anticum postice eum hoc conjuncta ae lineis aliquot irregularibus lobi antici per lobum posticum oblique curvatim continuatis lœvibus. Peetus sat dense punctulatum, vitta laterali viridi-ænea callos nonnullos pallidos includente et macula parva ad acetabula postice viridi-ænea ornatum, mesosterno medio maculis duabus oblongis lœvibus nigris signato. Hemelytra apicem abdominis attingentia, corio basin segmenti sexti connexivi attinente, margine apicali extus obtuse angulato, angulo apicali recto, epipleura ad basin macula ænea et pone hanc serie subtili punctulorum instructa, membrana lacteo-subhyalina, macula ad angulum basalem internum et venis nigris. Abdomen rotundato-ampliatum, dorso nigrum, connexivo pallido, segmentis medio dilute ferrugineo-punctulatis, ad basin et apicem fascia viridi-cinerea notatis, angulis apicalibus levissime prominulis, ventre leviter convexo, parce subtilissime punctulato, lateribus extra spiracula concoloria punctulis remotis fuscis dispersis, puneto minuto fuseo ad angulum apicalem segmentorum, macula majore extra spiraculum segmenti primi, macula minuta extra et intra spiraculum segmenti secundi intraque spiracula segmentorum ceterorum viridi-ænea, segmento sexto feminæ medio quam lateribus duplo longiore, angulis apicalibus subrectis. Pedes straminei, femoribus parte apicali viridi-nigro-conspersis, subtus prope apicem utrinque spinulis perpauens pallidis armatis, tibiis antieis supra ad basin et apicem et paullo pone medium nigro-notatis, lateribus nigro-strigatis, tibiis posticis supra ad basin et apicem vitta viridi-nigra, subtus linea purpurea notatis (tibiæ mediæ desunt).

Long. ♂ 11 mm.

Mozambique; Rikatla. Coll. Montandon.

3. *Cœnomorpha Schioedtei*, sp. n.

Ovalis (δ) vel subovata (φ), straminea, fusco-punctata, punctis smaragdineis interspersis, purpureo et smaragdineo picta, partibus pallidis parcus, partibus purpureis et smaragdineis crebre punctatis. Caput pronoto medio paullo longius, apicem versus leviter angustatum, vittis duabus superioribus approximatis et vitta inferiore anteoculari smaragdineis, jugis apice valde oblique truncatis, rostro basin vel medium segmenti ventralis quarti attinente, antennis nigris, articulo primo subtus basin versus, annulo apicali articuli secundi et basali articuli quarti pallide flavis, articulis secundo et tertio paullo variabilibus, subaequilongis vel secundo tertio longiore, quarto secundo longiore (quintus deest). Pronotum maculis aliquot anterioribus et maculis basalibus septem obscure smaragdineis ornatum, macula basali media parva angusta, marginibus lateralibus anticus vix sinuatis, ab apice paullo ultra medium pallidis, angulis lateralibus leviter prominulis, rectis vel acutiusculis. Scutellum macula magna basali latera non attingente obscure purpurea postice utrinque in vittam brevem subsmaragdineam prolongata signatum, angulis basalibus smaragdineis. Pectus medio fuscum, pleuris smaragdineo-maculatis. Hemelytra apicem abdominis attingentia, corio parte basali excepta purpurascente, macula subbasali, macula magna media totam latitudinem occupante maculisque tribus apicalibus obscure smaragdineis, membrana subæneo-fusea. Abdomen dorso rubiginosum, segmentis connexivi basi et apice fascia smaragdinea ornatis, angulis apicalibus acute prominulis nigris, ventre vittis duabus latis mediis nigris vel fuscis per segmenta quinque prima extensis in maculas interdum dissolutis notato, parce fusco-punctato, latera versus densius smaragdineo-punctato, limbo laterali pallido impunctato, angulis basali et apicali segmentorum nigrinis, spiraculis fuscis, segmento sexto quinto medio paullo (φ) vel duplo (δ) longiore. Pedes pallide testacei, femoribus minute fusco-punctatis, subtus remote minute spinulosis, tibiis nigris, leviter virescentibus, annulo medio pallido, articulo ultimo tarsorum nigro.

Long. δ 14·5 mm., φ 17 mm.

Gaboon. Coll. Fallon.

Allied to *C. variegata*, P. B., but differently and much more richly coloured, with the head distinctly longer.

4. *Cœnomorpha segregata*, sp. n.

Ovata, supra ochracea, nigro-conspersa et pareius punctata, signaturis pronoti postice subvittiformibus, subtus infuscata, pallido-conspersa, densius punctata. Caput pronoto medio æquilongum, apicem versus levissime angustatum, supra lineis duabus mediis longitudinalibus antice abbreviatis et linea utrinque basali obliqua

nigris, jugis apice leviter oblique late truncatis, rostro apicem segmenti tertii ventralis attingente, antennis nigris, articulo primo apice excepto obscure testaceo, secundo et tertio sulcatis, hoc illo longiore, quarto tertio longiore, quinto tertio perpaullum longiore, pallide flavidæ, apice leviter fuscescente. Pronotum lateribus parum sinuatum, angulis lateralibus acutinsculis, levissime prominulæ. Hemelytra apicem abdominis leviter superantia, corio mæcula magna media nigra notato, membrana fusca, paucinervi. Abdomen sat fortiter rotundato-ampliatum, macula angusta oblonga marginali segmentorum pallida, segmentis connexivi basi et apice nigrinis, angulis apicalibus leviter prominulæ, ventre sat fortiter convexo, sulco medio obsoleto, spiraculis nigris antice callo parvo pallido terminatis, segmento quinto medio ad basin gibboso-elevato, segmento sexto maris quinto medio haud duplo longiore, angulis apicalibus obtusiœculis sed haud rotundatis, segmento genitali maris apice medio profunde sinuato. Pedes sordide testacei, femoribus minute fuscopunctatis, subtus remote minute spinulosis, tibiis nigris, mediis annulo medio pallido signatis (pedes postici desunt).

Long. ♂ 15.5 mm.

Gaboon. Coll. Fallon.

Differs from all the other species in the more convex venter with indistinct furrow, and in having (at least in the male) the fifth ventral segment gibbous at the base.

ADELOLCUS, gen. nov.

Corpus supra modice, subtus sat fortiter convexum. Caput supra planiusculum, parte anteoculari latitudine longiore, lateribus ante oculos leviter sinuatis, deinde parallelis, jugis apice oblique subrotundato-truncatis, tylo jugis perpaullo longiore, ocellis pone lineam inter basin oculorum fietam sitis, bucculis humilibus, antice rectangulatim leviter elevatis, rostro coxas posticas superante, articulo primo postice bucculas subæquante, secundo tertio longiore, quarto tertio breviore, antennis ab apice capitâ quam ab oculis fere duplo longius distantibus. Pronotum marginibus lateralibus anticis integrum, anguste reflexum, angulis posticis rotundatis. Scutellum parte apicali sat angustum, frenis post medium extensis. Prostethium postice subrectum; mesosternum medio carinatum: sulcus orificialis oblique antrorum longe extensus, rectus, apice acutus, area evaporativa ampla, usque ad angulum anticum mesopleuræ oblique extensa. Corium scutello longius, margine apicali recto, prope angulum apicalem levissime sinuato; membrana simpliciter nervosa. Abdomen subtus per segmentum secundum late levissime sulcatum, angulis posticis segmentorum leviter prominulæ. Femora antica subtus obsolete denticulata; tibiæ omnes supra planæ, marginatæ.

The structure of the rostrum, the straight hind margin of

the propleurae, the different structure of the orificia, and the much larger *area evaporativa* distinguish this genus from *Cœnomorpha*, Dall. From *Seribonia*, Stål, it is separated by the non-pilose body and the absence of the large sericeous spots to the venter. From both these genera it differs in the non-serrate lateral margins of the pronotum and the very short and shallow ventral furrow. It is apparently also allied to the Indian genus *Nevisanus*, Dist., but is at once distinguished by the structure of the rostrum and by having the antennæ inserted much nearer to the eyes.

5. *Adelolcus solitarius*, sp. n.

Ovatus, flavo-testaceus, sparsim fusco-punctatus, supra nigro-variegatus et conspersus, corio parte basali excepta incarnato. Caput subitus prope marginem lateralem vitta viridi-nigra ænescente notatum, rostro apicem segmenti secundi ventris attingente, piceo, articulo ultimo nigro (antennæ desunt). Pronotum medio capite paullo longius, marginibus lateralibus antieis parum sinuatis, pone medium nigris, angulis lateralibus leviter prominulis, subrotundatis, marginibus lateralibus posticis ad marginem costalem corii obtuse angulatis. Hemelytra apicem abdominis parum superantia, membrana fusca. Pectus ænescens, mesosterno medio piceo-ferrugineo. Abdomen hemelytris latius, connexivo detecto, hujus segmentis fascia media dilutiore notatis, ventre medio fere impunctato, lateribus leviter ænescente, limbo lateralí nigrino, macula media marginali segmentorum pallide flava, segmento sexto medio macula nigro-picea signato. Pedes brumnei, tibiis nigrinis, annulo lato medio flavidò ornatis.

Long. ♀ 17·5 mm.

Gaboon. Coll. Fallon.

6. *Memmia excurrens*, sp. n.

Subovata, sat dense punctata, nigra, margine lateralí anteoculari et vittis tribus posticis capitis, margine apicali (utrinque breviter abrupto) pronoti, linea media longitudinali pronoti et scutelli, margine hujus pone frene, margine lateralí basali et margine apicali corii, callo majusculo prope angulos basales scutelli et pone medium corii, callis sparsis minoribus pronoti scutelli coriique pallide flavis, marginibus lateralibus prothoracis, fascia media extus dilatata segmentorum connexivi, acetabulis, limbo postico pleurarum, macula magna metapleuræ, ventre medio maenulaque lateralí subsemicirculari segmentorum ventralium rufo-testaceis, segmento sexto ventrali et lobis genitalibus fuscis. Caput subæque longum ac latum, remote pilosulum, tylo et jugis longitudine aequalibus, bucculis modice elevatis, postice quam antice hand altioribus, rostro apicem segmenti secundi ventris attingente,

articulo tertio secundo distinete longiore, antennis subtiliter puberulis, nigris, articulo secundo primo vix triplo longiore, tertio secundo circiter sexta parte breviore (art. quartus deest). Pronotum utrinque prope latera profundius impressum, marginibus lateralibus anticis levissime sinuatis, ante medium crenatis, angulis lateralibus obtusis, subrotundatis, parum prominulis, angulis posticis obtuse rotundatis. Scutellum ad angulos basales fovea impressa præditum. Corium basin segmenti sexti connexivi attingens; membrana subfuscō-hyalina, venis obscurioribus. Abdomen hemelytris nonnihil brevius, angulis posticis segmentorum levissime prominulis. Pedes nigri, vitta supera femorum, plus quam dimidia parte basali femorum posteriorum carinisque superis lateralibus tibiarum a basi ultra medium testaceis.

Long. ♀ 14 mm.

Gaboon. Coll. Fallon.

Allied to *M. vicina*, Sign., but the colour-markings are different, the third antennal joint is much longer, the lateral lobes of the head are shorter, and the lateral margins of the pronotum slightly but distinctly sinuated.

The genus *Memmia* was hitherto known only from Madagascar.

MACROPELTA, gen. nov.

Caput subhexagonum, parte anteoculari apicem versus angustata, jugis tylo paullo longioribus, apice distantibus, oculis valde exsertis, breviter stylatis, ocellis pone lineam inter basin oculorum fictam positis, rostro coxas posticas subattingente, articulis secundo et tertio longitudine subæqualibus, antennis quadriarticulatis, articulo primo apicem capitis parum superante, secundo ceteris longiore. Pronotum lateribus ante medium serratum, angulis posticis acute lobulato-prominulis. Scutellum perlongum, abdome paullo brevius, corio longius, lateribus ante medium sinuatis, frenis medium scutelli haud attingentibus. Prosternum apice medio profundius arenato-sinuatum; mesosternum medio longitudinaliter impressum, in fundo impressionis carinatum; orificia auriculata. Abdomen subtus sulco levi longitudinali instructum. Femora subtus spinulosa.

This genus is at once distinguished from *Memmia*, Stål, by the scutellum, which is longer than the corium and sinuated before the middle (as in *Brachymenum*, Mayr), and by the frena, which do not reach the middle of the scutellum. In *Memmia* the scutellum is considerably shorter than the corium and sinuated much behind the middle, and the frena reach much beyond the middle of the scutellum. There are also the following differences of minor importance:—The first antennal joint scarcely passes the apex of the head, the second

joint is strongly pilose, the eyes are very prominent and shortly petiolate, the hind angles of the pronotum are acutely lobed (as in the genera *Peltasticus*, Dall., *Aleria*, Stål, and *Paraleria*, Reut.). These characters, together with the unspotted connexivum, give this genus quite a different facies. The genus *Memmia* is more nearly allied to *Atelocera* than to *Macropelta*: in all three genera the females have two large sericeous patches on the venter.

7. *Macropelta Cowani*, Dist.

Memmia Cowani, Dist. Ent. Month. Mag. xix. 108 (1882).

I have received this insect from Antananarivo (Madagascar).

8. *Nealeria asopoides*, Stål.

On examining an example of this species agreeing to some extent with Stål's description I find that the tarsi in this genus are biarticulated as in *Paraleria*. I propose to call Stål's genus *Nealeria*, as the name *Aleria* is preoccupied by Marshall for a genus of Hymenoptera.

ZAPLUTUS, gen. nov.

Corpus oblongo-ovatum. Caput exsertum, pone oculos extus et paullo sursum valde prominulos basin versus levissime angustum, parte anteoculari subconica, latitudine basali longiore, jugis tylo longioribus, apice acutis, hiscentibus, recurvis, marginibus lateralibus nonnihil ante oculos spina longa acuta extus antrorum sursumque producta ac paullo ante apicem dente extus et sursum vergente armatis, ocellis pone lineam inter basin oculorum fietam sitis, ab oculis quam a linea media capitidis paullo longius distantibus, bucculis humilibus, antice in dentem elevatis, postice ultra oculos parum productis, rostro gracili, coxas posticas longe superante, articulo primo bucculas parum superante, secundo primo vix duplo longiore, tertio secundo longiore, quarto secundo breviore, antennis gracilibus, quinque-articulatis, ab apice capitidis quam ab oculis paullo longius insertis, articulo basali apicem jugorum hand attingente. Pronotum apice capite cum oculis angustius, marginibus lateralibus anticis ante medium denticulatis, angulis lateralis in spinam validam acutam extus et oblique sursum productis, angulis posticis obtusissimis, disco ante medium transversim impresso. Scutellum parte apicali angustum, apice recurvum, frenis sat longe post medium scutelli extensis. Propleura margine postico rectae; mesosternum tenuiter carinatum; orificia auriculata. Corium scutello longius; membrana venis longitudinalibus instructa, vena una alterave furcata. Abdomen

subtus usque ad apicem segmenti quinti profunde sulcatum, angulis apicalibus segmentorum acute sublobato-prominulis. Pedes longisculi, graciles, femoribus inermibus, tibiis supra planis et marginatis.

This magnificent genus must be placed in the vicinity of *Solenogaster*, Reut., from which it is, however, easily distinguished by the structure of the head &c.

9. *Zaplatus madagascariensis*, Fallon.

Atelocera madagascariensis, Fallon, Naturaliste, xi. 120 (1889).

Supra smaragdineus, dense punctatus, callis oblongulis irregularibus flavidis dispersus, pronoti margine apicali pone spatium interoculare et marginibus lateralibus anticis flavidis, capitis macula ante medium, spinis anteocularibus dentibusque antecapitalibus, pronoti macula utrinque antica, fascia basali utrinque angustata et abbreviata apiceque spinarum lateralium ac scutelli macula oblonga laterali media fuscis, clavo et parte plus quam dimidia interiore corii albo-cinereis, fusco-maculatis, remote inaequaliter punctatis, dorso abdominis rufo-testaceo, connexivo viridi-nigro, fascia segmentorum submedia lata flavo-testacea ornato; subtus flavo-testaceus, inaequaliter punctatus, mesosterno medio carina excepta fusco, vitta laterali capitis pectorisque lata et ventris angustiore smaragdinea, vitta pectorali in maculas ferme dissoluta, vitta ventrali macula magna laterali flavo-testacea in quoque segmento notata. Caput pronoto longius, bucculis et vitta adjacente pallidis, nigro-punctatis, rostro testaceo, antennis nigris, apicem versus levissime incrassatis, basi articulorum omnium et apice articuli secundi pallescentibus, articulis secundo, tertio quartoque subaequilongis, quovis primo longiore, quinto quarto paullo longiore. Pronotum longitudine sua fere triplo latius, marginibus lateralibus anticis sat profunde sinuatis, ante sinum rotundatis. Scutellum pone frena pallido-marginatum, parte basali nonnihil elevata rugam latam ad apicem emittente. Hemelytra apicem abdominis attingentia, corio basin segmenti quinti connexivi paullo superante, margine apicali levissime rotundato, membrana cinerea, ad angulos basales et medio infuscata, venis fuscis. Abdomen subtus disco acervatim, latera versus densius nigro-punctatum, segmento sexto macula magna nigrescente notato. Pedes testacei, annulo lato subapicali femorum, annulis duobus et apice tibiarum articuloque ultimo tarsorum fusco-nigris.

Long. ♀ 17 mm.

Madagascar.

I have described Mons. Fallon's type specimen.

Tammerfors, Finland.